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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/810,283	03/16/2001	Rolf Espe	3985	5921

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FASSE PATENT ATTORNEYS, P.A.  
P.O. BOX 726  
HAMPDEN, ME 04444-0726

EXAMINER

SALVATORE, LYNDIA

ART UNIT	PAPER NUMBER
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1771

8

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.



**Office Action Summary**

Application No.

09/810,283

Applicant(s)

ESPE, ROLF

Examiner

Lynda M Salvatore

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03/04/03.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4,5,7-9 and 19-21 is/are allowed.
- 6) ☒ Claim(s) 1,3,6,10-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:



## DETAILED ACTION

### *Response to Amendment*

1. Applicant's amendment, Paper No. 6 has been entered as requested and carefully considered. Claims 1,10, and 11 have been amended, claim 2 has been canceled, and new claims 19-21 have been added. Applicant's amendment to the specification is found sufficient to overcome the objection set forth in section 1 of the last Office Action. Applicant's amendments and accompanying remarks are also found sufficient to overcome the 112 2<sup>nd</sup> paragraph rejections set forth in sections 2-6 of the last Office Action. Despite this advance, Applicant's amendments and accompanying remarks are not found to patentably distinguish claims 1,3,6, and 10-18 over the prior art and upon further consideration, a new ground(s) of rejection is made.
2. Applicant's amendments and accompanying arguments regarding the rejection of claims 7-9 rejected under 35 U.S.C. 103(a) as being unpatentable over Hennecken, DE 197 09 644 A1 as applied to claim 1 and further in view of Saito et al., US 4,985,483 as set forth in section 11 of the last Office Action are found to be persuasive. As such this rejection is withdrawn.

### *Claim Rejections - 35 USC § 103*

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1,3,6,10,13,17 and 18 are rejected under 35 U.S.C. 102(b) as being obvious over Hennecken et al., DE 19709644 (translated) in view of Kawachi et al., US 4,603,175.

The German patent to Hennecken, discloses a press pad produced on a conventional loom, comprising threads having a core of aromatic polyamide and/or a thermoplastic and/or a pre-oxidized polyacrylonitrile and/or a polyimide and/or polybenzimidazole and/or aramide. The



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sheath coating or cover is made from rubber and/or silicone elastomer and/or polytetrafluoroethylene. Hennecken further teaches adding metal powder to the silicone elastomer sheath coating having the weight ratio of silicone elastomer: metal powder mixture from 90:10 to 40:60 respectively.

Applicant has amended claim 1 to include the limitation of a "cross-linked" elastomer, which Hennecken fails to specifically teach. However, the patent issued to Kawachi et al., teaches a thermoplastic fluoroelastomer composition comprising a fluoroelastomer, a liquid fluoroelastomer and optionally a cross-linking agent (Abstract). Kawachi et al., discloses various examples of suitable liquid fluoroelastomers such as fluorosilicone (Column 2, 35-45). Kawachi et al., teaches that the thermoplastic fluoroelastomer composition exhibits excellent heat, abrasion, chemical, oil, and solvent resistance and may be formed into a tube, strand, sheet, film or applied to various substrates such as wires or building materials (Column 1, 11-20 and claim 9).

Therefore, motivated by the desire to provide a press pad with excellent heat, abrasion, chemical, oil, and solvent resistance it would have been obvious to one having ordinary skill in the art at to either form the threads and/or the sheath covering of the Hennecken et al., press pad with the fluoroelastomer composition of Kawachi et al. Additionally, as taught by Kawachi et al., it would have also been obvious to coat or impregnate the press pad of Hennecken et al., with the fluorelastomer composition. One of ordinary skill in the art would be motivated by the heat, abrasion, chemical, oil and solvent resistance provided by said fluoroelastomer composition.

Applicant further amended claim 1 to include the limitation of "wherein said amount is at least 10 weight percent of a total weight of said press pad". Although, Kawachi et al., fails to



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expressly teach using a specific weight percent of the fluoroelastomer composition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the amount of fluoroelastomer composition used. It is the position of the Examiner that since the Kawachi et al., teaches providing "a sufficient amount" and produces the same results as obtained in the instantly claimed invention, it naturally follows that the prior art reference uses a similar if not the same amount. It has been held that discovering an optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233

5. Claims 11,12 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hennecken et al., DE 19709644 (translated) in view of Kawachi et al., US 4,603,175, as applied to claims 1 and 13 above, and further in view of Douglas et al., WO 96/13376.

Hennecken fails to teach a press pad having warp or weft threads comprising a "proportion" of at least one metal, however, the published PCT application to Douglas et al., discloses a woven fabric of heat resistant strands wherein a substantial proportion of either the warp or the weft comprises a silicone elastomer (Abstract). Douglas et al., also teaches a preferred woven press pad embodiment comprising silicone elastomer covered copper wire in the weft direction and at least one of stainless steel, copper, copper alloy or copper or stainless steel wires wrapped with an aromatic polyamide or polyester yarn (Abstract). Alternatively, at least one of the warp and weft may comprise solid silicone strands (Page 4, 26-30). In addition, non-metal strands such as aromatic polyamide or polyester yarns may also be used as the warp strands. Metal strands such as copper or stainless steel may also be used to wrap the heat resistant polyamide or polyester yarns (Page 8, 19-24). Douglas et al., further teaches that multi-stranded copper wire exhibits a high reversed bending strength and therefore has a lower



susceptibility to metal fatigue and a greater flexibility than the conventional wire used for electrical wiring (Page 7, 9-20).

Therefore, motivated to enhance strength while maintaining flexibility, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the metal strands of Douglas et al., for the aromatic polyamide and/or a thermoplastic and/or a pre-oxidized polyacrylonitrile and/or a polyimide and/or polybenzimidazole and/or aramide yarns of Hennecken et al., and Kawachi et al.

***Allowable Subject Matter***

6. Claims 7-9 and are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Specifically, the prior art of Hennecken et al., and Kawachi et al., fails to not teach a woven fabric comprising a "cross-linked" elastomer blend of silicone rubber and fluorinated rubber. An updated search no new substantial art for which to base a rejection and presently, there is no motivation or suggestion to combine references to form an obvious type rejection.

7. Claims 19-21 are allowable over the prior art of Hennecken et al., and Kawachi et al. Specifically, the combined references fail to teach or fairly suggest a woven fabric that includes an amount of at least one fluoroelastomer produced by the copolymerization or terpolymerization of vinyl chloride or a woven fabric that includes "cross-linked" blend of silicone rubber and a fluorinated rubber or a fluorinated silicone rubber. An updated search produced no new substantial art for which to base a rejection and presently there is no motivation to combine references to form an obvious type rejection.



*Conclusion*


8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M Salvatore whose telephone number is 703-305-4070. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
TERREL MORRIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700